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McDevitt et al.

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(54) **PORTABLE APPARATUS AND ASSOCIATED METHOD FOR PHASED ARRAY FIELD CALIBRATION**

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(57) **ABSTRACT**

A system for calibrating an array antenna comprises a calibration antenna at a first location relative to an array antenna, a first set of calibration files, and a processor. Based on received far field data from a far field data test that was run on the array antenna, using the calibration antenna, the processor is configured to generate a model predicting the actual location of the calibration antenna relative to the array antenna and to generate predicted far field data based on the model. The model is adjusted, if needed, by comparing the predicted far field data with the received far field data. Based on the model, new calibration files are generated that substantially correlate to the actual location of the calibration antenna.

20 Claims, 41 Drawing Sheets

